

BARRELS



SEGUIN MOREAU

Selection - Classic - Premium





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FRENCH OAK BARRELS

SEGUIN MOREAU BELIEVES CERTAIN WINES MERIT SOLUTIONS THAT ENABLE THEM TO FULLY REVEAL THEIR POTENTIAL WHILE RESPECTING THEIR UNIQUE CHARACTER AND THE ORIGINAL EXPRESSION OF THE FRUIT.

TECHNICAL CHARACTERISTICS:

Oak species



Available models

Selection

- . Bordeaux Export (225L, 21 or 27mm)
- . Bourgogne Export (228L, 27mm)
- . 300L Barrel (27mm)

Classic

- . Bordeaux Export (225L, 21 or 27mm)
- . Bourgogne Export (228L, 27mm)
- . 300L Barrel (27mm)

Premium

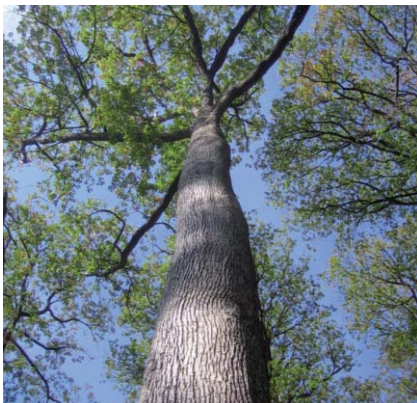
- . Bordeaux Export (225L, 21 or 27mm)
- . Bourgogne Export (228L, 27mm)
- . 300L Barrel (27mm)

Other models:

- . 350L (27mm)
- . 400L (27mm)
- . 500L Puncheon (27mm)
- . 600L Demi-Muid (34 or 42mm)
- . 600L Micro fermentor (34 or 42mm)

Toasting

To be decided according to your enological objective



WHY AGE WINE IN A BARREL?

Sure, the first thing you need to make a good wine is good grapes. But the greatest wines throughout the world are also produced in oak barrels. **The aging conditions when the wine is in contact with the wood naturally combine all the factors required for stabilizing, refining and enriching the wine**, both chemically and to please all the senses.

Originally nothing more than simple containers, barrels have become real working tools which now **take a wine up to a precise enological profile at the end of the aging process**. Whether used to bring aromatic flavors and tastes or to give wine the oak's oxygenation qualities without making it "woody", all combinations are possible by using the right techniques. We can help you make the right decision for your wine.

THE BEST OF OAK: ITS ENOLOGICAL POTENTIAL

From forest to grain, then from grain to Enological Potential, we have refined our criteria for selecting the oak over the past 40 years. Our aim has not changed though: **supply you with barrels whose enological quality meets your needs and remains as steady as possible** from one barrel to the next and from one year to the next.

Since the invention of the ICÔNE process in 1998, our R&D and wood procurement teams have been working together to draft **our own map of France, showing the Enological Potential of oak**.

Of course, we, like the whole cooperage industry, look for 200-year-old trees, as tall and upright as possible, with a wide girth, but we are the only company today with a database detailing the aromatic and tannic composition of the lumber we have bought over the past 15 years. Our wood procurement policy is now run on the basis of this new map of French oak.

"It is not the name of the forest that counts, it's the quality of the tree."

Bernard LARDILLON, Wood Procurement Director, SEGUIN MOREAU 1988-2002

Premium

TYPE OF WOOD:

Mostly extra-fine grain (<2mm)

Opulent, elegant aromatic potential

SENSORIAL IMPACT:

Structure and freshness:



Complexity and volume:



Classic

TYPE OF WOOD:

Mostly fine grain (2-3mm)*

Complex and well balanced aromatic potential

SENSORIAL IMPACT:

Structure and freshness:



Complexity and volume:



Selection

TYPE OF WOOD:

Mostly semi fine grain (3-5mm)*

Creamy and smooth aromatic potential

SENSORIAL IMPACT:

Structure and freshness:



Complexity and volume:



FOR WHICH RED WINE?	OBJECTIVE	RECOMMENDED TOASTING
<ul style="list-style-type: none"> For fine wines to keep: mild aromas and very silky structure on the palate ⇨ Pinot noir, Cabernet Sauvignon, Merlot, Syrah, Tempranillo, Nebbiolo, Malbec, etc.	Complex, elegant aromas (toast, vanilla, sweet spice)	Medium toasting (M, ML, MLT) and/or open (MO, MLO)
<ul style="list-style-type: none"> For wines made with very ripe grapes 	Fruity, ripe and intense	AQUAFLEX and long toasting (ML)

⇨ RECOMMENDED AGING TIME: 12 to 24 months

FOR WHICH WHITE WINE?	OBJECTIVE	RECOMMENDED TOASTING
<ul style="list-style-type: none"> For fine wines to keep: rich aromas and very elegant on the palate ⇨ Chardonnay, sweet whites, etc.	Brings out the fruit and balance on the palate	AQUAFLEX
	Adds mildness and complexity	Long and intense toasting (ML, MLT)

⇨ RECOMMENDED AGING TIME: 10 to 15 months

FOR WHICH RED WINE?	OBJECTIVE	RECOMMENDED TOASTING
<ul style="list-style-type: none"> For balanced wines: noble structure, plenty of finesse and elegance ⇨ Cabernet Sauvignon, Syrah, Pinot noir, Tempranillo, Touriga Nacional, Grenache, Shiraz, Zinfandel, etc.	A wide range of aromas (fresh wood, vanilla, toast)	Medium toasting (M, ML)
	Sensory profile on the fresh side. Gentle sensation of toast and smoky aromas	Open toasting (MO, MLO)
<ul style="list-style-type: none"> For wines made with very ripe grapes 	Fresher fruit and floral notes	AQUAFLEX and long toasting (ML)

⇨ RECOMMENDED AGING TIME: 10 to 16 months

FOR WHICH WHITE WINE?	OBJECTIVE	RECOMMENDED TOASTING
<ul style="list-style-type: none"> For most white wines: softens the aromas and increases the volume on the palate ⇨ Chardonnay, Sauvignon, Verdejo, etc.	Gentle sensation of toast and smoky aromas	AQUAFLEX
	Increases the fruity aromas	Medium toasting (M, ML, MLT)

⇨ RECOMMENDED AGING TIME: 5 to 12 months

FOR WHICH RED WINE?	OBJECTIVE	RECOMMENDED TOASTING
<ul style="list-style-type: none"> For delicate varieties: perfect for keeping the fresh fruit aromas and for adding structure to the palate ⇨ Pinot noir, Merlot, Sangiovese, Grenache, Shiraz, etc.	Adds sweetness without any excessive aromas	Long and/or open toasting (ML, MLO)
<ul style="list-style-type: none"> For powerful varieties that tolerate the wood: the toasted aromas can be brought to the fore ⇨ Syrah, Tannat, Malbec, etc.	Notes of ripe fruit, spice and roasted aromas	Intense toasting (M+, MLT)

⇨ RECOMMENDED AGING TIME: 8 to 16 months

FOR WHICH WHITE WINE?	OBJECTIVE	RECOMMENDED TOASTING
<ul style="list-style-type: none"> For the vast majority of white wines: keeps the full flavor of the fruit and adds milder, even toastier notes ⇨ Chardonnay, Sauvignon, Albariño, etc.	Discreet woody notes, brings out the fruit flavor	AQUAFLEX and medium toasting (M, ML)
	Notes of ripe fruits and sweet pastries	Long toasting (ML)
	Smoky, mineral notes	Intense toasting (M+, MLT)

⇨ RECOMMENDED AGING TIME: 5 to 10 months

* The "grain" is the gap between two growth rings, visible on the cross cut of an oak tree trunk.



THE VOLUME EFFECT: “WOOD WITHOUT WOOD”

Choosing a barrel larger than the standard volumes (225 or 228L) is a technique to ensure that the wine keeps the fruit flavor and adds tension on the palate.

The first effect of increasing the volume of the barrels is to reduce the ratio of wood surface to liter of wine, resulting in less intense woody flavor added to the wine. Together with a gentle, penetrating toasting (such as AQUAFLEX and ML), it is a very efficient and clever way of giving the wine the benefit of structure from aging in wood without adding too much aroma (no vanilla, toasted or smoky sensation after aging).

It has also been shown that using larger barrels reduces the amount of oxygen added during aging. The volume effect keeps the palate fresh and tight.

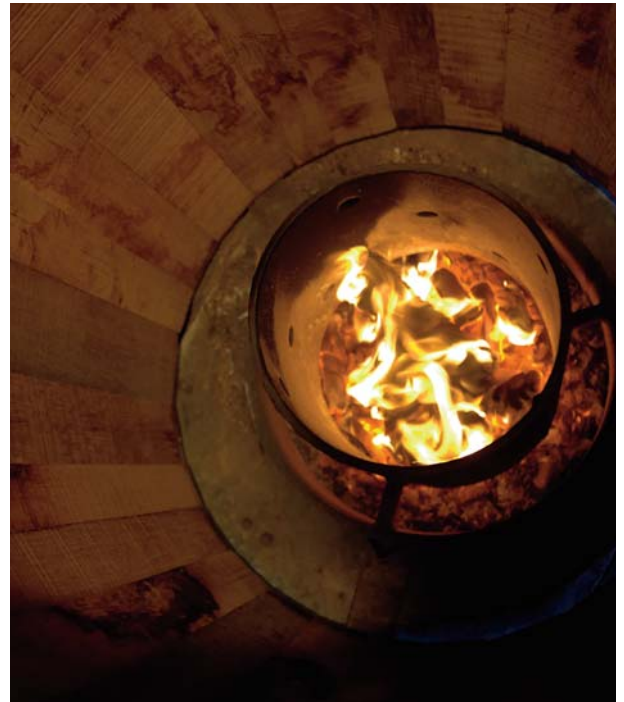


THE TOASTING EFFECT

The toasting of oak for flavor (“bousinage”) influences how much woody aroma the barrel imparts to the wine: to explain the overall phenomenon, one might say that the longer the wood is toasted, the wider its palette of aromas and the gentler its tannins.

From experience, we have identified what kind of toasting best suits each oak selection:

- a *Selection* barrel is ideal for fairly pronounced, long toasting (M+, ML and MLT). It will develop its full aromatic palette and soften the tannins of the grapes,
- a *Classic* barrel will go well with medium toasting (M, ML) which will give plenty of roundness and complexity,
- a *Premium* barrel, which is by nature both complex and mild, will need less intense, more open toasting (ML, MLO) to keep its full potential.



Each toasting method alters the profile of the wood, gives it specific nuances and will therefore have an influence on the aging process. It is therefore essential to choose the right toasting method, and our team is on hand to help you make the right decision for your wine.

A FEW FIGURES

- **Over 800 species** of the botanical genus *Quercus* (oak)
- **2 species** of French oak used in cooperage:
 - *Quercus Petrae* (sessile oak)
 - *Quercus Robur* (pedunculata oak)
- **150-200 years**: the average age of oaks used in cooperage
- **50-80cm**: the diameter of oaks used in cooperage
- **1m³ of lumber (oak trunk)**
 - **0.2 cubic meters of rough staves**
 - **2 barrels + 2 heads**
- **1 trunk, 4m long and 80cm in diameter (2 cu. m.)** → **4 barrels + 4 heads**
- **40-70%**: moisture content of the fresh oak (upon arrival at the seasoning yard)
- **14-16%**: required moisture content to work with rough staves
- **15-18 months**: time required for drying the staves
- **24 months**: average time required for optimal maturation of the staves



DID YOU KNOW?

Oak staves need to remain 24 months in the open air for optimal maturation. The required physical and chemical phenomena need time to act on the raw wood.

Wood has an ideal quality of maturation that gives just the right amount of flavor. Once this level has been reached, any additional ripening might cause:

- excessive damage to the ellagitannins: **less structure will be added**
- **leaching of certain aromatic precursors** (e.g. methyl octalactone isomers)
- **irreversible mechanical alterations** (splits or tendrils), generating significant loss of wood
- increased risk of undesirable micro-organisms that can produce **unpleasant moldy, earthy aromas.**

To respect the oak wood and to avoid these kinds of organoleptic defects, our R&D team recommends that **maturation periods in excess of 48 months be avoided.**



MATURATE TO REVEAL

The unique maturation process set in place by our Research and Development teams **helps the oak with its physical and chemical transformations to reveal its perfect organoleptic expression**. It consists of a specific way of stacking the staves in order to allow air to circulate freely between the pieces of oak, and successive periods of watering and more air-drying.

Throughout this maturation period, the oak composition undergoes deep transformations:

- **leaching and enzymatic transformation of certain undesirable molecules** present in large quantities in the green wood (glycosylated coumarins, water-soluble tannins, etc.)
- **through-drying**: the wood arrives with 40-70% moisture, but is not worked until moisture is around 14-16%
- the expression of the pre-existing **aromatic potential** in the stave (oxidative breakdown of the lignin, hydrolysis of the odorless aromatic precursors, etc.)



Successful maturation fulfills this triple objective of leaching, drying and revelation of the aromatic potential of the staves. **The average maturation time in our maturation yard is 24 months.**



A LITTLE CHEMISTRY: THE MAIN COMPONENTS OF OAK

Forty years of fundamental research have given us a thorough knowledge of the structure of oak wood, its chemical makeup and the way its molecules interact with those of the wine.

ELLAGITANNINS

Oak tannins form a buffer to protect the sensory profile of the wine from its surroundings.

They:

- help its **aromas to open up**, by limiting the formation of sulfur compounds during fermentation (especially in white wines), then during aging
- **protect it from oxidation** during aging by fixing the oxygen.

However, in the wine, concentrations of ellagitannins are much lower than those of the grape tannins, which have most impact on taste.

VOLATILE PHENOLS

These aromatic molecules – naturally present in oak – are preserved in the barrel manufacturing process and **improve the final bouquet of the wine during aging**.

Example: eugenol, which gives a spicy aroma of cloves.

HEMICELLULOSE AND LIGNIN

These compounds, also known as “wood biopolymers” are the **aromatic precursors** of the toasting process. During “bousinage”, their transformation under heat produces a panel of aromatic molecules: furan compounds (smoky notes) and phenol aldehydes (vanilla, toffee and spice).

METHYL-OCTALACTONE

The isomers in this molecule are **essential compounds for the expression of woody aromas in wine**. They are naturally present in wood to varying degrees, mainly depending on the type of oak and the genetic makeup of each tree.

The oak also contains precursors of this molecule, which can increase the lactone content of the staves during maturation, toasting and even throughout the aging process of the wines in the barrel.

QUERCUS TRITERPENOIDS

Recently discovered at the Bordeaux Institute of Vine and Wine, these compounds play an important role in the sensory profile of wines aged in barrels. They are **responsible for the sensation of “sugariness”** in dry wines.

Our teams of scientists are making daily progress in their knowledge of oak and the wood-wine interactions, giving our profession ever newer enological prospects.



PROMOTING SUSTAINABLE FOREST MANAGEMENT

Initiated in 1999, the Program for the Endorsement of Forest Certification (PEFC) is now the world leader in sustainable forest management certification. Its aim is to promote sustainable use of forest resources by humans while maintaining the triple role played by forests to preserve biodiversity, capture CO₂ and regulate the climate.

Because we were the first cooperage to obtain the PEFC™/10-31-640 certification – in 2005 – our commitment is now official: from the procurement of wood to the shipping of barrels, the whole quality chain meets the requirements of sustainable management of French forests.



QUALITY AND SAFETY

Our barrels are subject to rigorous manufacturing conditions that aim to guarantee food safety and to meet current regulatory requirements.

Quality and food approval certificates are available on request at: oenos@seguin-moreau.fr



CONTACT

Our representatives are available to assist you and share their knowledge.

For personalized advice, please contact them at: oenos@seguin-moreau.fr



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